California Regional Water Quality Control Board
Santa Ana Region

Order No. 01-23
NPDES No. CA0105694

Waste Discharge Requirements
for
The Metropolitan Water District of Southern California
Robert B. Diemer Filtration Plant
Yorba Linda, Orange County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board), finds that:

1. On August 30, 2000, the Metropolitan Water District of Southern California (hereinafter discharger) submitted a complete report of waste discharge for renewal of its permit to discharge wastes under the National Pollutant Discharge Elimination System from the Robert B. Diemer Filtration Plant. Discharges from the facility are currently regulated under Order No. 96-23, NPDES No. CA0105694, which expired on March 1, 2001.

2. The Robert B. Diemer Filtration Plant treats a blend of raw water from the California State Water Project and the Colorado River for potable use. The water treatment plant waste is discharged to six settling basins, two of which are used for emergency backup. The following is a list of outfall locations, discharge volumes, and discharge points:

| Outfall No. | Latitude | Longitude | Discharge (gpd) | Discharge to |
|---|---|---|---|---|
| 001[1] | 33°54'36" | 117°48'50" | 100,000 | Telegraph Canyon Creek and Carbon Canyon Creek |
| 002[2] | 33°54'50" | 117°49'20" | ----- | Unnamed water course and Carbon Canyon Creek |
| 003[3] | 33°54'49" | 117°49'01" | 25,000 | Telegraph Canyon Creek |
| 004[4] | 33°54'51" | 117°49'10" | 10,000 | Unnamed water course and Telegraph Canyon Creek |

3. Telegraph Canyon Creek is tributary to Carbon Canyon Creek. Flows in Carbon Canyon Creek can be diverted to the Santa Ana River, Reach 2 or the San Gabriel River, depending on recharge and flood control needs.

[1] Four sedimentation basins.
[2] Two emergency discharge sedimentation basins.
[3] Plant rejection structure (hydraulic overflow, leakage, and nuisance water discharge).
[4] Leakage discharge from 25 million gallon reservoir.

4. A revised Water Quality Control Plan (Basin Plan) became effective on January 24, 1995. The plan contains beneficial uses and water quality objectives for water in the Santa Ana Region.

5. A revised Basin Plan applicable to the San Gabriel River was adopted by the Los Angeles Regional Water Quality Control Board (Region 4) and became effective February 23, 1995.

6. The requirements contained in this order are necessary to implement both Basin Plans.

7. The beneficial uses of Carbon Canyon Creek and Reach 2 of the Santa Ana River include:

   a. Municipal and domestic supply,
   b. Agricultural supply,
   c. Groundwater recharge,
   d. Water contact recreation,
   e. Non-contact water recreation,
   f. Warm freshwater habitat,
   g. Wildlife habitat, and
   h. Rare, threatened or endangered species.

8. The beneficial uses of the San Gabriel River include:

   a. Municipal and domestic supply,
   b. Water contact recreation,
   c. Non-contact water recreation,
   d. Warm freshwater habitat, and
   e. Wildlife habitat.

9. The discharges overlie the Santa Ana Forebay Groundwater Subbasin, the beneficial uses of which include:

   a. Municipal and domestic supply,
   b. Agricultural supply,
   c. Industrial service supply, and
   d. Industrial process supply.

10. In accordance with Water Code Section 13389, the issuance of waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

11. The Board has considered andtidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, and finds that this discharge is consistent with those provisions.

12. Effluent limitations and new source performance standards established pursuant to Section 301, 302, 303(d), 304, and 306 of the Clean Water Act and amendments thereto are applicable to the discharge.

13. The Regional Board has notified the discharger and other interested agencies and persons of its intent to prescribe revised waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.

14. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and the regulations and guidelines adopted thereunder, shall comply with the following:

## A. EFFLUENT LIMITATIONS

1. The four-month average suspended solids concentration of the discharge shall not exceed 30 milligrams per liter.

2. The 12-month average total dissolved solids (TDS) concentration shall not exceed 650 mg/l, unless the discharger implements a plan, with the approval of the Executive Officer, to offset TDS discharges in excess of 650 mg/l.

3. The 12-month average TDS concentration shall not exceed the 12-month average TDS concentration in the water supply by more than 75 mg/l, unless the discharger implements a plan, with the approval of the Executive Officer, to offset TDS discharges in excess of the 75 mg/l mineral increment

4. The discharge of any substances in concentrations toxic to human, animal, plant, or aquatic life is prohibited.

5. The pH of the discharge shall be at all times within the range of 6.5 and 8.5 pH units.

6. The discharge of wastes to property not owned or controlled by the discharger is prohibited.

7. There shall be no visible oil and grease in any discharge.

## B. RECEIVING WATER LIMITATIONS

1. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Board or State Board, as required by the Clean Water Act and regulations adopted thereunder.

2. The discharge shall not cause any of the following:

   a. Coloration of the receiving waters, which causes a nuisance or adversely affect beneficial uses.

   b. Contain taste or odor producing substances at concentrations that cause a nuisance or adversely affect beneficial uses.

   c. The deposition of oil, grease, wax or other materials in concentrations which result in a visible film or in the coating of objects in the water, or which cause a nuisance or affect beneficial uses.

   d. The deposition of objectionable deposits along the banks or the bottom of the stream channel.

   e. The depletion of the dissolved oxygen concentration below 5.0 mg/l in the receiving waters. In addition, the waste discharge shall not cause the median dissolved oxygen concentration to fall below 85% of saturation or the 95th percentile concentration to fall below 75% of saturation within a 30-day period.

   f. Raise the temperature of the receiving waters above 90°F (32°C) which normally occurs during the period of June through October, or above 78°F (26°C) during the rest of the year.

   g. A change in the ambient pH levels more than 0.5 pH units.

   h. The presence of radioactive materials in concentrations which are deleterious to human, plant or animal life.

   i. The increase in the amounts of suspended or settleable solids of the receiving waters, which will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.

   j. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving water. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species

k. The bioaccumulation of chemicals in aquatic resources to levels that are harmful to human health.

3. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this Order, including such accelerated or additional monitoring necessary to determine the nature and impact of the non-complying discharge.

## C. PROVISIONS

1. This order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, which shall become effective 10 days after date of its adoption provided the Regional Administrator of the Environmental Protection Agency has no objection. If the Regional Administrator objects to its issuance, the order shall not serve as an NPDES permit until such objection is withdrawn.

2. This Order expires on June 1, 2006 and the discharger must file an application in accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

3. The discharger shall comply with Monitoring and Reporting Program No. 01-23. The Executive Officer of the Board may revise this monitoring and reporting program at any time to increase the number of parameters to be monitored, the frequency of monitoring or reporting, or the number and size of samples to be collected.

4. In an enforcement action, it shall not be a defense for a discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.

5. The Board, EPA, and other authorized representatives shall be allowed:

   a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

   b. Access to copy any records that are kept under the conditions of this Order;

   c. To inspect any facility, equipment (including for monitoring and control), practices, or operations regulated or required under this Order, and

   d. To photograph, sample and monitor for the purpose of compliance with this Order, or as otherwise authorized by the Clean Water Act.

6. Except for data determined to be confidential under Section 308 of the Clean Water Act, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of the EPA. As required by the Clean Water Act, effluent data shall not be considered confidential. Knowingly making false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and Section 13387 of the California Water Code.

7. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

8. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided to the Executive Officer (909-782-4130) and the Office of Emergency Services (1-800-852-7550), if appropriate, as soon as the discharger becomes aware of the circumstances. A written report shall be submitted within five days and shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates/times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Executive Officer or the Executive Officer's designee may waive the above-required written report on a case-by-case basis.

9. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.

10. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.

11. The provisions and requirements of this Order do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

12. This Order does not convey any property rights of any sort, or any exclusive privilege.

13. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge. The discharger shall give advance notice to the Board of any planned changes in the permitted facility or activity that may result in noncompliance with these waste discharge requirements.

14. In the event of any change in control of the waste discharge facility presently controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Board.

15. This Order is not transferable to any person except after notice to and approval by the Board. The Board may require modification, or revocation and re-issuance, of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act.

16. Order No. 96-23 is hereby rescinded.

17. The discharger shall maintain a copy of this Order at the site so that it is available to site operating personnel at all times. Key operating personnel shall be familiar with its content.

## D. PERMIT REPOPENING, REVISION, REVOCATION, AND RESISSUANCE

1. This Order may be reopened to address any changes in state, federal plans, policies or regulations which would affect the quality requirements for the discharges.

2. This Order may be modified, revoked and reissued, or terminated for cause. No permit condition will be stayed by the filing of a request by the discharger for modification, revocation and re-issuance, or termination of this Order, or by a notification of anticipated noncompliance or planned changes.

3. This Order may be reopened to include effluent limitations for pollutants determined to be present in significant amounts in the discharge through any monitoring program.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on June 1, 2001.

_____

Gerard J. Thibeault
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. 01-23

NPDES No. CA0105694
for
Metropolitan Water District of Southern California
Robert B. Diemer Filtration Plant
Yorba Linda, Orange County

## A. MONITORING AND REPORTING REQUIREMENTS

1. All sampling and sample preservation shall be in accordance with the current edition of *"Standard Methods for the Examination of Water and Wastewater"* (American Public Health Association).

2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR Part 136 (latest edition) *"Guidelines Establishing Test Procedures for the Analysis of* promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this monitoring and reporting program (M&RP). In addition, the Regional Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136.

3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services or EPA or at laboratories approved by the Regional Board's Executive Officer.

4. Whenever the discharger monitors any pollutant more frequently than is required by this order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.

5. All analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services or EPA or at laboratories approved by the Executive Officer of the Regional Board.

6. Discharge monitoring data shall be submitted in a format acceptable by the Regional Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order. The hard copy of submitted reports shall serve as the official submittal.

7. The discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the Order.

8. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons of noncompliance, and of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the discharger will be in compliance. The discharger shall notify the Regional Board by letter when compliance with the time schedule has been achieved.

9. The discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Board at any time. Records of monitoring information shall include:

   a. The dates, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling, and/or measurements;
   c. The date(s) analyses were performed;
   d. The laboratory which performed the analyses;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used;
   f. All sampling and analytical results;
   g. All monitoring equipment calibration and maintenance records;
   h. All original strip charts from continuous monitoring devices;
   i. All data used to complete the application for this Order; and,
   j. Copies of all reports required by this Order.

10. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

## B. EFFLUENT MONITORING

1. A sampling station shall be located where representative samples of the discharge can be obtained from Outfall 001, the four sedimentation basins and Outfall 003, the plant rejection structure (hydraulic overflow, leakage, and nuisance water discharge). The following shall constitute the effluent monitoring program:

| Constituent | Units | Type of Sample | Minimum Frequency of Sample |
|---|---|---|---|
| Flow | MGD | Flow Meter | Continuous |
| pH | pH units | Grab | Monthly |
| Lead | mg/l | Grab | Monthly |
| Selenium | mg/l | Grab | Monthly |
| Suspended Solids | mg/l | Grab | Monthly |
| Total Chlorine Residual | mg/l | Grab | Monthly |
| Total Dissolved Solids | mg/l | Grab | Monthly |

| Constituent | Units | Type of Sample | Minimum Frequency of Sample |
|---|---|---|---|
| Toxicity Testing | See Section C, below | Grab | Quarterly |
| EPA Priority Pollutants (See Attached List) | µg/l | Grab | Quarterly |

2. Monthly samples shall be collected by the 10th working day of each month.

3. Quarterly samples shall be collected by the 10th working day of January, April, July, and October.

4. The total amount of salt (TDS) discharged from the facility to the Santa Ana River, Carbon Canyon Creek, and Telegraph Canyon Creek, the excess amount of salt requiring offset, and the mitigation methods taken shall be determined and reported annually.

5. The monitoring frequency for those priority pollutants that are detected during the required quarterly monitoring shall be accelerated to monthly. To return to the monitoring frequency specified, the discharger shall request and receive approval from the Regional Board's Executive Officer or designee.

## C. TOXICITY MONITORING

1. The discharger shall conduct critical life stage chronic toxicity testing in accordance with Method 1002.0 – Survival and Reproduction test for the water flea, *Ceriodaphnia dubia* as specified in *"Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms,"* third edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 1994, Cincinnati, Ohio (July 1994, EPA/600/4-91/002).

2. The presence of chronic toxicity shall be estimated as specified in Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Third Edition, EPA/600/4-91/002.

3. Results shall be reported in TUc, where Tuc = 100/NOEC or 100/Icp or ECp (in percent effluent). The no observed concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test, that causes no observable adverse effect on the tests organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significant different from the controls). The inhibition concentration (IC) is a point estimate of the toxicant concentration that causes a given percent reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (the EPA Interpolatiom Method). The effective concentration (EC) is a point estimate of the toxicant concentration that would cause a given percent reduction in quantal biological measurement (e.g., larval development, survival) calculated from a continuous model (e.g., probit).

Additional Testing Requirements

a. A series of at least five dilutions and a control will be tested. The series shall be within 60% to 100% effluent concentration.

b. If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicants shall also be conducted using the same test conditions as the effluent toxicity test (e.g., same test duration, etc).

c. If either of the reference toxicant test or the effluent tests do no meet all test acceptability criteria as specified in the manual, then the discharger must re-sample and re-test within 14 days or as soon as the discharger receives notification of failed tests.

d. Control and dilution water should be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.

## D. REPORTING

1. Monitoring reports shall be submitted by the 30th day of the month following sampling.

2. All data developed under Effluent Monitoring B.1. above, shall be included in the annual report required in Reporting D.3, below.

3. Annually, a report shall be submitted summarizing the data collected for the TDS offset program showing compliance with the Basin Plan objectives. The report shall be submitted by January 30th of the following year.

4. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken which will bring the discharge into full compliance with these requirements at the earliest time and submit a timetable for corrections.

5. All reports shall be signed by an authorized agent of the discharger and shall be submitted under penalty of perjury.

Ordered by _____
Gerard J. Thibeault
Executive Officer

June 1, 2001

**Attachment "A"**
***M&RP No. 01-23, NPDES No. CA0105694***
***Metropolitan Water District of Southern California, Robert B. Diemer Filtration Plant***

## EPA PRIORITY POLLUTANT LIST

| Metals | Method |
|---|---|
| Antimony | ICP |
| Arsenic | GF/AA |
| Beryllium | ICP |
| Cadmium | ICP |
| Chromium | ICP |
| Copper | GF/AA |
| Lead | GF/AA |
| Mercury | CV/AA |
| Nickel | ICP |
| Selenium | GF/HYDRIDE |
| Silver | ICP |
| Thallium | ICP |
| Zinc | ICP |

| Miscellaneous | Method |
|---|---|
| Cyanide | 335.2/335.3 |
| Asbestos (not required unless requested) | |
| 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD) | 8280 |

| Pesticides | Method |
|---|---|
| Aldrin | 608 |
| Chlordane | " |
| Dieldrin | " |
| 4, 4' - DDT | " |
| 4, 4' - DDE | " |
| 4, 4' - DDD | " |
| Alpha Endosulfan | " |
| Beta Endosulfan | " |
| Endosulfan Sulfate | " |
| Endrin | " |
| Endrin Aldehyde | " |
| Heptachlor | " |
| Heptachlor Epoxide | " |
| Alpha BHC | " |
| Beta BHC | " |
| Delta BHC | " |
| Gamma BHC | " |
| Toxaphene | " |
| PCB 1016 | " |
| PCB 1221 | " |
| PCB 1232 | " |
| PCB 1242 | " |
| PCB 1248 | " |
| PCB 1254 | " |
| PCB 1260 | " |

| Base/Neutral Extractibles | Method |
|---|---|
| Acenaphthene | 625 |
| Acenaphthylene | " |
| Anthracene | " |
| Benzidine | " |
| Benzo (a) Anthracene | " |
| Benzo (a) Pyrene | " |
| Benzo (b) Fluoranthene | " |
| Benzo (g,h,i) Perylene | " |
| Benzo (k) Fluoranthene | " |
| Bis (2-Chloroethoxy) Methane | " |
| Bis (2-Chloroethyl) Ether | " |
| Bis (2-Chloroisopropyl) Ether | " |
| Bis (2-Ethylhexyl) Phthalate | " |
| 4-Bromophenyl Phenyl Ether | " |
| Butyl Benzyl Phthalate | " |
| 2-Chloronaphthalene | " |
| Chrysene | " |
| Dibenzo (a,h) Anthracene | " |
| 4-Chlorophenyl Phenyl Ether | " |
| 1,2-Dichlorobenzene | " |
| 1,3-Dichlorobenzene | " |
| 1,4-Dichlorobenzene | " |
| 3,3-Dichlorobenzidine | " |
| Diethyl Phthalate | " |
| Dimethyl Phthalate | " |
| Di-N-Butyl Phthalate | " |
| 2,4-Dinitrotoluene | " |
| 2-6-Dinitrotoluene | " |
| 1,2-Dipenylhydrazine (as Azobenzene) | " |
| Di-N-Octyl Phthalate | " |
| Fluoranthene | " |
| Fluorene | " |
| Hexachlorobenzene | " |
| Hexachlorobutadiene | " |
| Hexachlorocyclopentadiene | " |
| Hexachloroethane | " |
| Indeno (1,2,3-cd) Pyrene | " |
| Isophorone | " |
| Naphthalene | " |
| Nitrobenzene | " |
| N-Nitrosodimethylamine | " |
| N-Nitrosodi-N-Propylamine | " |
| N-Nitrosodiphenylamine | " |
| Phenanthrene | " |
| Pyrene | " |
| 1,2,4-Trichlorobenzene | " |

| Acid Extractibles | Method |
|---|---|
| 2-Chlorophenol | 625 |
| 2,4-Dichlorophenol | " |
| 2,4-Dimethylphenol | " |
| 4,6-Dinitro-O-Cresol | " |
| 2,4-Dinitrophenol | " |
| 2-Nitrophenol | " |
| 4-Nitrophenol | " |
| P-Chloro-M-Cresol | " |
| Pentachlorophenol | " |
| Phenol | " |
| 2, 4, 6 - Trichlorophenol | " |

| Volatile Organics | Method |
|---|---|
| Acrolein | 603 |
| Acrylonitrile | " |
| Benzene | 601/602 |
| Bromoform | " |
| Carbon Tetrachloride | " |
| Chlorobenzene | " |
| Chlorodibromomethane | " |
| Chloroethane | " |
| 2-Chloroethyl Vinyl Ether | " |
| Chloroform | " |
| Dichlorobromomethane | " |
| 1,1-Dichloroethane | " |
| 1,2-Dichloroethane | " |
| 1,1-Dichloroethylene | " |
| 1,2-Dichloropropane | " |
| 1,3-Dichloropropylene | " |
| Ethylbenzene | " |
| Methyl Bromide | " |
| Methyl Chloride | " |
| Methylene Chloride | " |
| 1,1,2,2-Tetrachloroethane | " |
| Tetrachloroethylene | " |
| Toluene | " |
| 1,2-Trans-Dichloroethylene | " |
| 1,1,1-Trichloroethane | " |
| 1,1,2-Trichloroethane | " |
| Trichloroethylene | " |
| Vinyl Chloride | " |

California Regional Water Quality Control Board
Santa Ana Region

June 1, 2001

ITEM: 7

SUBJECT: Waste Discharge Requirements, Metropolitan Water District of Southern California, Robert B. Diemer Plant, Yorba Linda, Orange County, Order No. 01-23, NPDES No. CA0105694,

DISCUSSION:

The Metropolitan Water District of Southern California owns and operates the Robert B. Diemer Filtration Plant located in the Yorba Linda area of Orange County. The facility imports and treats approximately 400 million gallons per day of raw water from the California State Water Project and Colorado River for potable use in Southern California. Approximately 100,000 gallons per day of water treatment wastewater is discharged to six settling basins, two of which are used on an emergency basis. The clarified wastewater is discharged from these basins into local drainages (Telegraph Canyon Creek, Carbon Canyon Creek, and unnamed tributaries) which are tributaries to the Santa Ana River, Reach 2, and which overlie the Santa Ana Forebay Groundwater Subbasin. At times, flows in Carbon Canyon Creek can be diverted to a tributary of the San Gabriel River.

The discharge is currently regulated under Order No. 96-23, NPDES No. CA0105694. Order No. 96-23 expired on March 1, 2001. On August 30, 2000, the discharger submitted a complete report of waste discharge for renewal of its permit.

The beneficial uses of the Santa Ana Forebay Groundwater Subbasin include municipal and domestic supply, agricultural supply, industrial services supply, and industrial process supply.

The beneficial uses of Carbon Canyon Creek include municipal and domestic supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and support of rare, threatened or endangered species.

The beneficial uses of the Santa Ana River, Reach 2 include agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and support of rare, threatened or endangered species.

The proposed Order limits the concentrations of suspended solids and total dissolved solids in the discharge. The suspended solids limit is based on best professional judgement to protect the beneficial uses of the receiving surface waters. The limits for total dissolved solids (TDS) are based on the water quality objective for Reach 2 of the Santa Ana River or on the quality of the water supplied to the facility plus a reasonable TDS increment. The more restrictive of the two applies to the discharge.

The Diemer plant receives water from the State Water Project and the Colorado River. Due to restricted supplies from the State Water Project, most of the water treated at Diemer comes from the Colorado River. The Colorado River water is high in TDS (640 mg/l). Because of this, the discharger has experienced difficulty in meeting the TDS limits in the permit since 1991. The discharger has implemented various projects to offset the effects of these high TDS discharges. The proposed order requires such projects to continue to be implemented in lieu of strict compliance with the TDS limits.

RECOMMENDATION:

Adopt Order No. 01-23, NPDES No. CA0105694 as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section – Terry Oda (WTR-5)
U.S. Army District, Los Angeles, Corps of Engineers – Regulatory Branch
U.S. Fish and Wildlife Service – Carlsbad
State Water Resources Control Board, Office of the Chief Counsel – Ted Cobb
State Water Resources Control Board, Division of Water Quality – Jim Kassel
California Regional Water Quality Control Board – Los Angeles Region
State Department of Water Resources - Glendale
State Department of Fish and Game – Long Beach
State Department of Health Services – Santa Ana
Orange County Health Care Agency – Jack Miller
Orange County Public Facilities and Resources Department
Orange County Water District – Nira Yamachika
City of Yorba Linda – City Manager